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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/522,202 | 01/27/2006 | Jean-Marc Martin | GER-0674 | 3721 |

23413 7590 07/20/2007
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| EXAMINER | |
| CHEN, SHIH CHAO | |

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| ART UNIT | PAPER NUMBER |
| 2821 | |

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| 07/20/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,202

Applicant(s)

MARTIN ET AL.

Examiner

Shih-Chao Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>1/17/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on Jan. 17, 2005 has been considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Altwasser (U.S. Patent No. 6,64,551).

Regarding claim 1, Altwasser teaches in figures 1-4 resonant detection or identification antenna of the type comprising at least one turn (1, 2) which comprises at least one electrically conducting wire and is connected to a transponder electronic chip (5), the operating frequency of the antenna being greater than or equal to 10 MHz (i.e. 13.56 MHz; See col. 5, lines 22-23), an area defined by the at least one turn being substantially less than or equal to 0.30 m² (See col. 2, lines 26-36), wherein a total capacitance of the antenna is substantially greater than or equal to 140 pF (i.e. 500pF

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to 5nF, See col. 3, lines 52-55) and a Q-factor of the at least one turn is substantially greater than or equal to 30 (i.e. at least higher than 50, See col. 3, lines 33-35).

Regarding claim 2, Altwasser teaches in figures 1-4 resonant antenna according to Claim 1, wherein the transponder chip (5) has a first capacitor of predetermined value and in that a second capacitor (See col. 3, lines 58-64) is placed in parallel with the electronic chip in such a way that the overall capacitance of the antenna (6) is greater than or equal to 140 pF.

Regarding claim 3, Altwasser teaches in figures 1-4 resonant antenna according to Claim 1, wherein the at least one turn (1, 2) has mechanical properties suitable for the antenna (6) to retain by itself a predetermined shape (See Fig. 4).

Regarding claim 4, Altwasser teaches in figures 1-4 resonant antenna according to Claim 1, wherein the at least one turn (1, 2) is fastened to a support (i.e. the cover of the RFID transponder or a dielectric layer).

Regarding claim 5, Altwasser teaches in figures 1-4 resonant antenna according to Claim 1, wherein the at least one turn (1,2) comprises a single- strand wire.

Regarding claim 6, Altwasser teaches in figures 1-4 resonant antenna according to Claim 1, wherein the at least one turn (1, 2) comprises a wire formed from seven strands and the diameter of which is substantially equal to 0.25 mm (Examiner Note: It is inherent to have a wire formed from seven strands and the diameter of which is substantially equal to 0.25 mm because it is well-known in the art).

Regarding claim 7, Altwasser teaches in figures 1-4 resonant antenna according to Claim 1, wherein the at least one turn (1, 2) takes the form of a track deposited on a

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substrate (See col. 5, lines 1-2) and the width and the thickness of which are substantially equal to at least 1.4 mm and 35 μ m respectively (See col. 2, lines 26-36).

Regarding claim 8, Altwasser teaches in figures 1-4 resonant antenna according to Claim 1, wherein the antenna (6) comprises a single turn (1).

Regarding claim 10, Altwasser teaches in figures 1-4 resonant antenna according to Claim 1, wherein the antenna (6) comprises a first turn (1) and a second turn (2) which is placed inside the first turn and an area of the second turn lies substantially between 10% and 90% of an area of the first turn (See Fig. 4).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Altwasser (Cited above) in view of Coff et al. (U.S. Patent No. 6,600,420).

Altwasser teaches every feature of the claimed invention in paragraph 4 except the turn is rectangular shapes having cut corners.

Coff et al. teaches in figure 3 the turn (14c) is rectangular shapes having cut corners.

In view of the above statement, it would have been obvious to one having ordinary skill in the art at the time the invention was made by using coil-type antenna as taught by Coff et al. in order to the reduced length of these metallic elements in this

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geometry limits (See col. 10, lines 58-61).

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Altwasser (Cited above) in view of Liu et al. (U.S. Patent No. 7,154,449).

Altwasser teaches every feature of the claimed invention in paragraph 4 except the area of the second turn is substantially equal to half the area of the first turn.

Liu et al. teaches in figure 1 the area of the second turn [40] is substantially equal to half the area of the first turn [30].

In view of the above statement, it would have been obvious to one having ordinary skill in the art at the time the invention was made by using the plurality of loop antennas as taught by Liu et al. in order to have each one of the plurality of loop antennas is electrically isolated from each other (See Abstract).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-Chao Chen whose telephone number is (571) 272-1819. The examiner can normally be reached on Monday-Thursday from 7 AM to 5:30 PM, Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shih-Chao Chen
Primary Examiner
Art Unit 2821

Shih-Chao Chen
SHIH-CHAO CHEN
PRIMARY EXAMINER

SXC
July 15, 2007